# Contents of Atari TOS Developer's Kit

February 28, 1992

DOCUMENTS: The following documents are contained in the developer's kit. They are separated into groups of related documents for easier reference. Welcome letter Contents (this list) Introduction to the Atari Development Kit (November 6, 1991) **GDOS** letter **GDOS** Development Agreement Atari Developer Newsletter back issues Atari GEMDOS Reference Manual Table of Contents (Apr 4, 1986) Introduction (5/22/86) calling, filenames, fileops, processes, vectors, errors (4/4/86) GEMDOS FUNCTIONS BY NUMBER (undated) funcs (4/10/86) except pages (9), (21) and (25) (1-23-89) and page (13) (3-7-90) prg (4/4/86) Pexec Cookbook (September 6, 1991) Hitchhikers Guide to the BIOS (Nov 26, 1985) New pages: 5, 7, 12, 16, 38, 56, 75, (1-23-89) New pages: 15, 31, 32, 33, 34, 35, 36, 37, 37a (3-5-90) AHDI 3.00 Release Notes (April 18, 1990) Atari CHKDISK3 Documentation (April 22, 1990) **GEM Programming Guide** Volume 1-VDI (Third Edition: January 1989) Volume 2-AES (Third Edition: January 1989) A Programmer's Guide to FSMGDOS (10/91) A User's Guide To FSMGDOS GEM Resource Construction Set (undated) C Language Programming Guide (undated, CP/M-68K guide for use with Alcyon C) Gem DOS Programmer's Tools (undated, copyright 1989) Command Shell AS68 MADMAC Reference Manual (ver. 1.00) and update (ver. 1.07) ALN Docs (8/12/88) and update sheet (90/01/24) AR68 (Archive Ulitity) **DUMP** 

Engineering Hardware Specifications (7 January 1986)

Intelligent Keyboard Protocol (26 February 1985)

Chip specifications:

6850 ACIA, MC6850 (undated)

68901 MFP (undated)

AY-3-8910 PSG (undated)

Programmable Sound Generator Manual (February 1979)

GIACCESS (page 1, Mar 7, 1990, page 2, 1-23-90)

WD1770/1772 Floppy Disk Controller (undated)

Atari Monitor Summary Specifications (May 14,1986)

128K ROM cartridge schematics (1-2-85)

Blitter Chip (17 June 1987)

STE Hardware Developer Addendum

STE features list (undated)

Genlock and the STE (undated)

Video Modifications (25 May 1989)

How to Implement Fine Scrolling on the STE (text undated, listings dated 2 May 1989)

STE Digitized Sound Developer Information (undated)

TT030 Hardware Reference Manual (June 1990)

VME Bus Specifications for TT030 and Mega STE Products (undated)

Rainbow TOS Release Notes (05 March 1991)

STE TOS Release Notes (January 12, 1990)

TT TOS Release Notes (September 6, 1991)

STBook/STylus Expansion Bus Electrical Specifications (August 6, 1991)

DISKS: The ST-TT Developer's Kit has five disks, with files that fall into several basic categories. The arrangement of the categories on the disks is as follows:

Disk 1: Alcyon C Compiler / ALN Linker

Disk 2: MicroEMACS / Source Code Examples / RCS

Disk 3: MADMAC / DB Debugger / Programming Utilities

Disk 4: HDX / System Utilities / STE Programming Examples

Disk 5: Demonstrator / eXensible Control Panel

The individual files and folders of each category are listed and described below:

# **ALCYON C COMPILER**

The DEV folder contains the various files that make up the Alcyon C compiler package. The COMPILER files are contained within the DEV folder.

CP68.PRG C068.PRG Three pass "C" compiler

C168.PRG

MAC.PRG 68000/6502 macro assembler

AS68.PRG 68000 assembler

AS68INIT

AS68SYMB.DAT

BATCH.TTP ST batch processing program.

RM.PRG ST delete file program.

WAIT.PRG ST WAIT to return to desktop.

RAMDISK.PRG 64K Ramdisk.

RAMDISK.S Source to customize RAMDISK.

C.BAT Batch input file.

CRAMD.BAT Batch input file (uses ramdisk and MAC).

These files, when included within a "C" program, enable the use of the AES and VDI predefined messages, object types, GEMDOS definitions etc.

DEFINE.H Miscellaneous definitions. Ex. NIL, TRUE...

GEMBIND.H Do-it-yourself GEM binding kit.
GEMDEFS.H Common GEM definitions.
VDIBIND.H VDI external definitions.

TOSDEFS.H

OBDEFS.H

Common GEM OBJECT definitions.

OSBIND.H

"C" binding to GEMDOS and BIOS.

STDIO.H
PORTAB.H
DRI recommended.
MACHINE.H
DRI recommended.
TADDR.H
Tree address offsets.
CTYPE.H
"C" typing functions.

ERRNO.H

MATH.H

"C" header file.

OSIF.H

OSIFERR.H

SETJMP.H

STRING.H

DOS errors.

"C" header file.

System errors.

"C" header file.

"C" header file.

LARGE.S For compatibility with PC GEM.

#### **ALN LINKER**

The DEV folder also contains the ALN Linker and associated library files

ALN.PRG ST linker with overlay program and relocation program.

DOINDEX.PRG ST index file builder for ALN.

KERMIT.PRG File transfer program.

LINKAP.BAT Batch to link GEM application.
LINKACC.BAT Batch to link GEM desk accessory.

CLINK.BAT Batch to link C runtime.

LINKIO.BAT Batch to link DOS applications.

ACCSTART.O GEM accessory start file.

ACCSTART.S Source to desk accessory start.

APSTART.O GEM application start file.
APSTART.S Source to application start.

"C", VDI, AES library start files. GEMSTART.O Source to "C", VDI, AES start. GEMSTART.S

Example GEM desk accessory program. ACSKEL.C Example GEM application program. APSKEL.C

AES run time library. AESBIND

\*.NDX = library index file for ALN AESBIND.NDX

VDI run time library. **VDIBIND** VDIBIND.NDX

"C" run time library. **GEMLIB** 

GEMLIB.NDX

Floating point library. LIBF

LIBF.NDX

GEMDOS trap routine. OSBIND.O

#### **MICROEMACS**

The EMACS folder contains the text editor you may use for constructing your programs and several tutorial files for learning its use.

ME.TTP

TUTOR.DOC

TEXT1

TEXT2

TEXT3

# **SOURCE CODE EXAMPLES**

The EXAMPLES folder contains a number of additional folders with programming examples which illustrate use of the AES and VDI.

CARDS - folder containing: example dialog box and field usage.

CARDS.C

CARD.H

MAKECARD.BAT

CARDS.H

CARD.RSC

CTYPE.H CARD.DFN

CTYPE.O CARDS.O

CARDS.PRG

CORNER – example putting a dialog box in corners.

CORNER.C

CORNER.DFN

CORNER.H

CORNER.PRG

CORNER.RSC

BUTTON – example using right and left mouse button.

**BUTTON.C** 

**BUTTON.PRG NEWBUT.S** 

NEWBUT.O LINKBUT.BAT

DEADKEY - example allows input of foreign characters from keyboard.

DFADKEY.PRG

**DEADKEY.S** 

DOODLE - folder containing: source code for example draw program

DOODLE.C

DOODLE.INP

TREEADDR.H DOOSTART.O
LINKDO.BAT DOODLE.PRG
DOODRSC.C DOODLE.RSC
DOODLE.H DOOSTART.S
DOS.H DOODLE,DFN

FORMDO - folder containing: example of using a form.

FRMTST.C

FORM.DFN

FORM.H

FRMTST.PRG

FORM.RSC

MENU - folder containing: example menu program

MLINK.BAT

MENTST.C

MENTST.H

MENTST.DEF

MENTST.RSC

MENTST.PRG

TEMPLATE—folder with GEM program template.

TEMPLATE.C

Have a functional GEM application by surrounding your

application with template.c

#### RESOURCE CONSTRUCTION SET

The RCS folder contains the Resource Construction Set and other tools for creating and manipulating icons and GEM resource files.

RCS8.PRG

Resource construction set program.

RCS8.RSC

File for RCS.

RCS8.DFN

This enables you to see RCS.RSC as an example.

README

Ignore this unless you are converting alpha to beta RCS.

DEF2DFN.PRG

See above comment.

ICON -- folder containing: Shape editor and documentation.

SE.PRG

SE.RSC

SHIC.DOC

ATBALL.C

ATBALL.S

ATBALL.SHP

SDASM.PRG

SDASM.S

SDC.C

SDC.PRG

SDCST.S

ICONA - folder containing Icon editor.

ICED.PRG

ICED.RSC

RSCREATE - folder containing: information about resource create

DOC

STCREATE.C

STCREATE.INP

RSC.O

RSCRLIB.H

# **PROGRAMMING UTILITIES**

The UTILITIES folder contains a number of useful programming utility programs.

COMMAND.TOS

Command line interpreter.

DUMP.PRG

Hexadecimal file print utility.

FIND.PRG NM68.PRG File string locator utility.

Symbol table print utility.

SIZE68.PRG

Program segment size utility.

AR68.PRG CHKDISK3.PRG Library creation utility.

CHKDISK3.RSC

Disk editor utility.

DDCE AGS DDC

Program flags utility & documentation

PRGFLAGS.PRG PRGFLAGS.DOC

#### **DB DEBUGGER**

The DB folder contains the Atari Debugger along with associated files.

DB.PRG

Atari Debugger

**GEMDOS.DB** 

Procedure Scripts for GEMDOS debugging

RAMTRAP1.PRG

Utility program for use with DB source code for RAMTRAP1.PRG

RAMTRAP1.S RDB.PRG

Remote version of DB

STUBRES.PRG

Resident Stub for remote version

STUB.TTP

Non-resident stub for remote version

#### **MADMAC**

The MADMAC folder contains the Madmac Macro Assembler, along with associated example files and macro include files.

README

CONV65.MAN

CONV65.PRG

M.PRG

MAC.PRG

ATARI.S CODE.S

BUGS.S CODE65.S

EXAMPLE.S

EXAMPLE1.S

EXAMPLE2.S

IMAGES.S

INSTMAC.S

SHIFT.S

#### HDX

The HDX folder contains the current version of the Atari hard disk driver and Atari Hard Disk Utilties program.

AUTO – folder containing executable hard disk driver SHDRIVER.PRG

#### **DEMONSTRATOR**

The DEMONSTR.TOR folder contains the Demonstrator program, which can be used to create demonstrations of your applications programs.

DEMOBLD.PRG DEMOPLAY.PRG DEMOBLD.RSC DEMOPLAY.RSC

**MANUAL.TXT** 

EXTENSIBLE CONTROL PANEL

The XCONTROL folder contains the eXtensible CONTROL Panel, the basic CPX files (Control Panel Extensions), and programming examples for creating your own CPXs.

CPXDATA.H XCONTROL.ACC CPXSTART.S XCONTROL.TXT

CPX – folder containing the basic CPX modules

COLOR.CPX CONFIG.CPX
GENERAL.CPX MACCEL.CPX
MODEM.CPX PRINTER.CPX
SOUND.CPX WCOLORS.CPX

MASTER.RCS – folder containing a master GEM resource template for a CPX.

MASTER.DFN MASTER.H MASTER.RSC MASTER.RSH

SAMPLE.CP – folder containing complete source code for a sample CPX

CPXDATA.H CPXSTART.S
MAKEFILE SAMPLE.C
SAMPLE.CPX SAMPLE.DFN
SAMPLE.HDR
SAMPLE.ICN SAMPLE.PRJ
SAMPLE.RSC SAMPLE.RSH

XEVENT.CPX – folder containing sample source code for an event-driven CPX XVENT.C

XFORM.CPX — folder containing sample source code for a form-driven CPX XFORM.C

PREFIX - Folder containing utility for creating CPX headers

PREFIX.PRG Utility for creating CPX headers

PREFIX.RSC

PREFIX.TXT documentation for PREFIX.PRG

ICONS Folder containing sample icons for CPXs.

CONFIG.ICN icon from CONFIG.CPX
GENERAL.ICN icon from GENERAL.CPX
PRINTER.ICN icon from PRINTER.CPX
RS232.ICN icon from RS232.CPX
SOUND.ICN icon from SOUND.CPX

HDX - folder containing Atari Hard Disk Utilities program

WINCAP HDX.PRG
SHIP.PRG HDX.RSC
COLDBOOT.PRG HINSTALL.RSC

HINSTALL.PRG SHDRIVER.RAW

### SYSTEM UTILITIES

The SYSTEM folder contains a number of utility programs that either correct problems with various versions of TOS, or which enhance the system's performance.

CACHE100.TTP Disk cache program & documentation

MACCEL34.PRG Mouse Accellerator 3, version 4.0

MACCEL.TXT & documentation
SHIPACC.PRG Hard disk ship utility
SHIPREAD.ME & documentation

TOS14FIX.PRG Patch to correct problems with TOS 1.04 (Rainbow TOS)

TOS14FIX.TXT & documentation

FOLDR100.PRG Program to add memory to system pool

SERPTCH.PRG Patch to correct serial port problems with TOS 3.01

# STE PROGRAMMING EXAMPLES

The STE folder contains additional hardware programming demonstrations for the STE series computers.

ATARI.S Madmac include file for various system equates & macros BATMAN.NEO Sample NEOCHROME pictures for example program

BATSIGNI..NEO
BOOKCASE.NEO
BUTERFLY.NEO
CAESAR.NEO
CARTOON.NEO
CHEAT.NEO
DRILLSCR.NEO
DRILLSEA.NEO

HSCROLL.PRG scrolling example

HSCROLL.PRN

HSCROLL.S

NEOWALL.PRG scrolling example

NEOWALL.PRN

NEOWALL.S
DMASND3.DOC
DMA Sound information
SCROLLIN.DOC
Scrolling information

CONTROL.GEM GEM Metafile pictures showing documentation illustrations

DB15.GEM VIDMODS.GEM

# The following additional documents available upon request:

MetaDOS/CDROM Developers Documentation

Field Service Manuals with schematics (extra cost, contact Developer Administration for more information)

Atari SFP004 Floating Point Coprocessor Developer Kit (extra cost, includes SFP004, contact Developer Administration for more information)

Mega ST Series Internal Expansion Bus Documentation

ACSI/DMA Integration Guide (June 28, 1991)

SALAD (Still Another Line-A Document) (December 17, 1987)